** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed April 16, 2009 ** Attorney's Docket No.: 0119365-00002 / 911

IN THE INITED STATES PATENT AND TRADEMARK OFFICE

ant : Manuel Vega et al. Applicant:

Art Unit : 1631

Serial No.: 10/022,249

Examiner: Jerry Lin

Filed

Title '

: December 17, 2001

Conf. No.: 7196

Cust. No. : 77202

: HIGH THROUGHPUT DIRECTED EVOLUTION BY RATIONAL

MUTAGENESIS

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN **ACCORDANCE WITH 37 C.F.R. §§1.97-1.98**

Dear Sir:

Because this Supplemental Information Disclosure Statement is filed after the receipt of a First Office Action on the Merits for the above-captioned application, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 02-1818.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all information known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Supplemental Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. Form PTO-1449 (1 page) and copies of the cited non U.S. patent documents are provided herewith in connection with the above-captioned application.

The documents listed on the Form PTO-1449 are in the English language. Hence, in accordance with the requirements of 37 C.F.R. §1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

A copy of a Communication from the European Patent Office (Document I), issued April 14, 2008, in connection with corresponding European Patent Application No. 02798018.4 regarding the intention to grant an European patent is provided. A copy of an Office Action,

CERTIFICATE OF MAILING BY "EXPRESS MAIL" "Express Mail" Mailing Label Number EM 315453677 US Date of Deposit April 16, 2009.

I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria,

VA, 22313-1450.

** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed April 16, 2009 **

Attorney's Docket No.: 119365-00002/911

Applicant: Manuel Vega et al. Serial No.: 10/022,249

: December 17, 2001 Filed

Supplemental Information Disclosure Statement

(Document II), issued September 16, 2008, in connection with co-owned U.S. Application Ser. No. 10/658,355 is provided. A Copy of an Office Action, (Document III), issued December 24, 2008, in connection with co-owned U.S. Application Ser. No. 11/707,014 is provided. The table below lists Documents I-III and includes a column that provides a space next to the documents to be considered, for the Examiner's initials.

| Examiner Initial | Document No. | Document |
|---------------------|--------------|---|
| | I | Copy of Communication from European Patent Office, issued April 14, 2008, in connection with corresponding European Patent Application No. 02798018.4 |
| | II | Copy of Office Action, issued September 16, 2008, in connection with U.S. Application Ser. No. 10/658,355 |
| | III | Copy of Office Action, issued December 24, 2008, in connection with U.S. Application Ser. No. 11/707,014 |

In the Office Actions, dated May 13, 2008 and October 16, 2008, the Examiner indicated that the Information Disclosure Statements (IDSs) submitted on February 7, 2008 and July 10, 2008, were considered and initialed by the Examiner. The IDS filed on February 7, 2008 contained a Table listing Office Actions and European Examination Reports cited in related and corresponding U.S. and foreign Patent Applications. The IDS filed on July 10, 2008 contained a Table listing an International Search Report cited in a related foreign Patent Application. These tables were not initialed by the Examiner. These IDSs included the application number of the application in which the IDS was being submitted, a column that provides a blank space next to each citation for the Examiner's initials, a heading on the listing that clearly indicates the list is an Information Disclosure Statement, and copies of listed documents. Therefore, the February 7, 2008 and July 10, 2008 IDSs are in compliance with 37 CFR §§ 1.97, 1.98 and MPEP § 609 and Applicant respectfully requests that Examiner consider and initial all information listed in the tables submitted in the IDSs filed February 7, 2008 and July 10, 2008.

Further to the list provided in the communication filed on July 10, 2008, applicant also makes known to the examiner the following pending U.S. and International Applications that have one or more common inventors and/or are common ownership:

** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed April 16, 2009 ** Attorney's Docket No.: 119365-00002 / 911

Applicant: Manuel Vega et al.

Serial No.: 10/022,249 Filed

: December 17, 2001

Supplemental Information Disclosure Statement

| U.S.S.N. | Filing Date | Publ. No. | Publ. Date | Docket No. |
|-----------------|-------------|--------------|------------|---------------|
| 11/704,141 | 02/07/07 | 2008-0194477 | 08/14/08 | 922D |
| 11/706,088 | 02/13/07 | 2008-0274081 | 11/06/08 | 922F |
| 11/788,836 | 04/19/07 | 2008-0260820 | 10/23/08 | 932 |
| 12/082,365 | 04/09/08 | 2008-0274081 | 11/06/08 | 9221 |
| 12/082,389 | 04/09/08 | 2009-0053147 | 02/26/09 | 922J |
| Int'l App. No. | Filing Date | Publ No. | Publ. Date | Docket No. |
| PCT/GB07/004520 | 11/27/2007 | WO 08/065372 | 06/05/08 | 931PC |

Although these documents and applications are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the information, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97 (g and h), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56 (b) exists.

Applicant respectfully requests that the Examiner review the foregoing documents and make them of record in the file history of the above-captioned application.

Respectful submitted,

Stephanie Seidman Reg. No. 33,779

Attorney Docket No. 0119365-00002 / 911

Address all correspondence to: .

Stephanie Seidman K&L Gates LLP

3580 Carmel Mountain Road, Suite 200

San Diego, California 92130 Telephone: (858) 509-7410 Facsimile: (858) 509-7460

email: stephanie.seidman@klgates.com

Attachment 2: Copy of Information Disclosure Statement, filed July 10, 2008, in U.S. Application Serial No. 10/022,249



** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed July 10, 2008 **
Attorney's Docket No.: 119365-00002 / 911

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Manuel Vega et al.

: 1631 Art Unit

Serial No.: 10/022,249

Examiner: Jerry Lin

Filed

: December 17, 2001

Conf. No.: 7196

Cust. No.

: 77202

Title

: HIGH THROUGHPUT DIRECTED EVOLUTION BY RATIONAL

MUTAGENESIS

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN **ACCORDANCE WITH 37 C.F.R. §§1.97-1.98**

Dear Sir:

This Supplemental Information Disclosure Statement is filed after a Request for Continued Examination of the above-captioned application and prior to receipt of an Office Action. Thus, a fee for filing this statement should not be due. If, however, it is determined that a fee is due, any fees that may be due in connection with filing this paper may be charged to Deposit Account No. 02-1818.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all information known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Supplemental Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. Form PTO-1449 (1 page) and copies of the cited non U.S. patent documents are provided herewith in connection with the above-captioned application.

The documents listed on the Form PTO-1449 are in the English language. Hence, in accordance with the requirements of 37 C.F.R. §1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

> CERTIFICATE OF MAILING BY "EXPRESS MAIL" "Express Mail" Mailing Label Number EM 247737964 US Date of Deposit July 10, 2008 I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR

> §1.10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria,

VA, 22313-1450.

Steven Dennis

** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed July 10, 2008 **
Attorney's Docket No.: 119365-000027911

Applicant: Manuel Vega et al.

Filed

Serial No.: 10/022,249

: December 17, 2001

Supplemental Information Disclosure Statement

A Copy of an International Search Report, (Document I), issued June 13, 2008, in connection with co-owned International Application No. PCT/US2007/014219 is provided. The table below lists Documents I and includes a column that provides a space next to the documents to be considered, for the Examiner's initials.

| Examiner Initial | Document No. | Document |
|---------------------|--------------|--|
| | I | Copy of International Search Report, issued June 13, 2008, in connection with co-owned International Application No. PCT/US2007/014219 |

In the International Search Report, (Document I), issued June 13, 2008, the following document is cited: Chang et al., "Identification of functionally important residues of the epidermal growth factor-2 domain of factor IX by alanine-scanning mutagenesis. Residues Asn(89)-Gly(93) are critical for binding factor VIIIa." J Biol Chem 277:25393-25399 (2002). Document 1 is made of record in the instant application in this Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents.

In the Office Action dated May 13, 2008, the Examiner indicated that the Information Disclosure Statement (IDS) submitted on February 7, 2008 was considered and initialed by the Examiner. The IDS filed on February 7, 2008 contained a Table listing Office Actions and European Examination Reports cited in related and corresponding U.S. and foreign Patent Applications. This Table was not initialed by the Examiner. The Information Disclosure Statement includes the serial number of the application for which the IDS was submitted, a heading that clearly indicates the list is an Information Disclosure Statement, a Table containing a column with a blank space next to each citation for the Examiner's initials and copies of cited documents. Therefore, the February 7, 2008 IDS is in compliance with 37 CFR §§ 1.97, 1.98 and MPEP § 609. Applicant respectfully requests that the Examiner consider and initial all information listed in the Table submitted in the IDS filed February 7, 2008.

Further to the list provided in the Information Disclosure Statement filed on February 7, 2008, Applicant also makes known to the Examiner the following pending U.S. and International Applications that have one or more common inventors and/ or are commonly owned:

** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed July 10, 2008 ** Attorney's Docket No.: 119365-000027911

Supplemental Information Disclosure Statement

Applicant: Manuel Vega et al. Serial No.: 10/022,249

Filed

: December 17, 2001

| U.S.S.N. | Filing Date | Publ. No. | Publ. Date | Docket No. |
|-----------------|-------------|--------------|------------|---------------|
| 11/703,610 | 02/06/07 | 2008-0075672 | 03/27/08 | 922C |
| 11/729,267 | 03/27/07 | 2008-0038224 | 02/14/08 | 924 |
| 11/729,266 | 03/27/07 | 2008-0003202 | 01/03/08 | 924B |
| 11/818,985 | 06/15/07 | 2008-0102115 | 05/01/08 | 930 |
| 11/825,604 | 07/05/07 | 2008-0159977 | 07/03/08 | 922H |
| 11/998,387 | 11/28/07 | n/a | n/a | 931 |
| 12/082,365 | 04/09/08 | n/a | n/a | 922I |
| 12/082,389 | 04/09/08 | n/a | n/a | 922J |
| 12/082,383 | 06/06/08 | n/a | n/a | 922K |
| Int'l App. No. | Filing Date | Publ No. | Publ. Date | Docket No. |
| PCT/GB07/004520 | 11/27/2007 | n/a | n/a | 931PC |

Although these documents and applications are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the information, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97 (g and h), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56 (b) exists.

Applicant respectfully requests that the Examiner review the foregoing documents and make them of record in the file history of the above-captioned application.

Respectfully/submitted,

Stephanie Seidman Reg. No. 33,779

Attorney Docket No. 119365-00002 / 911

Address all correspondence to: Stephanie Seidman

Bell, Boyd & Lloyd LLP

3580 Carmel Mountain Road, Suite 200

San Diego, California 92130

Telephone: (858) 509-7410 Facsimile: (858) 509-7460 email: sseidman@bellboyd.com Attachment 3: Copy of Information Disclosure Statement, filed February 7, 2008, in U.S. Application Serial No. 10/022,249



Attorney's Docket No.: 17109-002001 / 911

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Manuel Vega et al.

Art Unit : 1631 Examiner: Jerry Lin

Filed

Serial No.: 10/022,249 : December 17, 2001

Conf. No.: 7196

Cust. No.: 20985

Title

: HIGH THROUGHPUT DIRECTED EVOLUTION BY RATIONAL

MUTAGENESIS

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN ACCORDANCE WITH 37 C.F.R. §§1.97-1.98

Dear Sir:

Because this Supplemental Information Disclosure Statement is after receipt of a first Office Action on the Merits of the above-captioned application, the filing fee of \$180 is enclosed. If no proper payment is enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1050.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all information known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Supplemental Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. Form PTO-1449 (1 page) and copies of the cited non U.S. patent documents are provided herewith in connection with the above-captioned application.

00000070 10022249 02/12/2008 CCHAU1

01 FC:1806

180.00 DP

CERTIFICATE OF MAILING BY "EXPRESS MAIL" "Express Mail" Mailing Label Number EV 965985825 US

Date of Deposit February 7, 2008

I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trader ark Office, P.O. Box 1450, Alexandria, VA. 22313-1450.

Stephanie Seidman

Applicant: Manuel Vega et al.

Serial No : 10/022 249

Attorney's Docket No.: 17109-002001 / 911

Supplemental Information Disclosure Statement

Serial No.: 10/022,249 Suppl Filed: December 17, 2001

The documents listed on the Form PTO-1449 are in the English language. Hence, in accordance with the requirements of 37 C.F.R. §1.98, as amended effective March 16, 1992, no further explanation of the listed item is necessary.

A copy of a European Examination Report (Document I), issued July 31, 2007, in connection with corresponding European Patent Application No. 02798018.4 is provided. Copies of three U.S. Office Actions (Documents II, III and IV), issued May 9, 2006, March 12, 2007, and December 10, 2007, respectively, in connection with co-owned U.S. Application Ser. No. 10/658,355 are provided. Copies of two European Examination Reports (Documents V and VI), issued August 2, 2005 and June 2, 2006, respectively, in connection with European Patent Application No. 03748392.2 are provided. European Patent Application No. 03748392.2 corresponds to U.S. Application Ser. No. 10/658,355. The table below lists Documents I-VI and includes a column that provides a space next to the documents to be considered, for the Examiner's initials.

| Examiner Initial | Document No. | Document | | |
|---------------------|--------------|---|--|--|
| I | | Copy of European Examination Report, issued July 31, 2007, in connection with European Patent Application No. 02798018.4 | | |
| 11 c | | Copy of U.S. Office Action, issued May 9, 2006, in connection with U.S. Application Ser. No. 10/658,355 | | |
| III | | Copy of U.S. Office Action, issued March 12, 2007, in connection with U.S. Application Ser. No. 10/658,355 | | |
| | IV | Copy of U.S. Office Action, issued December 10, 2007, in connection with U.S. Application Ser. No. 10/658,355 | | |
| V | | Copy of European Examination Report, issued August 2, 2005, in connection with European Patent Application No. 03748392.2 | | |
| | | Copy of European Examination Report, issued June 2, 2006, in connection with European Patent Application No. 03748392.2 | | |

In the U.S. Office Action, issued May 9, 2006 (Document II), three documents are cited:

1) US 5,096,815, 2) Alam et al., "Expression and purification of a mutant human growth hormone that is resistant to proteolytic cleavage by thrombin, plasmin and human plasma in vitro," J. Biochem. 65:183-190 (1998), and 3) Chiang et al., "In vivo genetic analysis of bacterial virulence," Ann. Rev. Microbiology 53:129-154 (1999). Documents 1-3 are made of record in

Applicant: Manuel Vega et al.

Serial No.: 10/022,249

Attorney's Docket No.: 17109-002001 / 911

Supplemental Information Disclosure Statement

Filed: December 17, 2001

the instant application in an Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents, filed June 22, 2006. In the U.S. Office Action, issued March 12, 2007 (Document III), one document is cited: 1) Stabach et al., "Sitedirected mutagenesis of alpha II spectrin at codon 1175 modulates its mu-calpain susceptibility," Biochemistry 36:57-65 (1997). Document 1 is made of record in the instant application in this Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents. In the U.S. Office Action, issued December 10, 2007 (Document IV), four documents are cited: 1) US 6,548,640, 2) Jones et al., "The rapid generation of mutation data matrics from protein sequences" CABIOS 8:275-282 (1992), 3) Alam et al., "Expression and purification of a mutant human growth hormone that is resistant to proteolytic cleavage by thrombin, plasmin and human plasma in vitro," J. Biochem. 65:183-190 (1998), and 4) Chiang et al., "In vivo genetic analysis of bacterial virulence," Ann. Rev. Microbiology 53:129-154 (1999). Documents 1-2 are made of record in the instant application in this Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents. Documents 3-4 are made of record in the instant application in an Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents, filed June 22, 2006.

In the European Examination Report, issued August 2, 2005 (Document V), five documents are cited: 1) US 5,223,409, 2) WO 01/61344, 3) Manetti et al., "Design and realization of a tailor-made enzyme to modify the molecular recognition of 2-arylpropionic esters by Candida rugosa lipase," *Biochem. Biophys. Acta.* 1543(1):146-158 (2000), 4) WO 03/023032 5) Lewerenz et al., "Shared receptor components but distinct complexes for alpha and beta interferons," *J. Mol. Biol.* 282(3):585-599 (1998). Documents 1-5 are made of record in the instant application in an Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents, filed March 15, 2005. In the European Examination Report, issued June 2, 2006 (Document VI), three documents are cited: 1) US 6,013,478, 2) WO 95/23813, 3) WO 01/32844. Documents 1-3 are made of record in the instant application in an Information Disclosure Statement, supplied with Forms PTO-1449 and copies of the cited non U.S. patent documents, filed March 15, 2005.

Applicant: Manuel Vega et al.

Serial No.: 10/022,249

Filed: December 17, 2001

Attorney's Docket No.: 17109-002001 / 911 Supplemental Information Disclosure Statement

Further to the list provided in the communication filed on March 2, 2007, applicant also makes known to the examiner the following pending U.S. and International Applications that have one or more common inventors and/ or are commonly owned:

| U.S.S.N. | Filing Date | Publication or | Publication | Docket No. |
|-----------------|-------------|----------------|---------------|--------------|
| | | Issue No. | or Issue Date | 005 |
| 11/267,871 | 11/03/05 | 2007-0249532 | 10/25/07 | 925 |
| 11/656,921 | 01/22/07 | 2007-0254838 | 11/01/07 | 922E |
| 11/703,610 | 02/06/07 | n/a | n/a | 922C |
| 11/704,141 | 02/07/07 | n/a | n/a | 922D |
| 11/706,088 | 02/13/07 | 2007-0172459 | 07/26/07 | 922F |
| 11/707,014 | 02/14/07 | 2007-0224665 | 09/27/07 | 922G |
| 11/729,267 | 03/27/07 | n/a | n/a | 924 |
| 11/729,266 | 03/27/07 | n/a | n/a | 924B |
| 11/788,836 | 04/19/07 | n/a | n/a | 932 |
| 11/818,985 | 06/15/07 | n/a | n/a | 930 |
| 11/825,604 | 07/05/07 | n/a | n/a | 922H |
| | | | | Declarat No. |
| Int'l App. No. | Filing Date | Publication | Publication | Docket No. |
| | | No | Date | |
| PCT/IB06/002034 | 05/04/06 | WO 06/120580 | 11/16/06 | 926PC |
| PCT/EP07/002700 | 03/27/07 | WO 07/110231 | 10/04/07 | 924PC |
| PCT/US07/14219 | 06/15/07 | n/a | n/a | 930PC |
| 101/080//1121/ | | | | |

Although these documents and applications are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the information, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97 (g and h), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56 (b) exists.

Applicant respectfully requests that the Examiner review the foregoing documents and make them of record in the file history of the above-captioned application.

** Attachment to Comments on Reasons for Allowance: Copy of Information Disclosure Statement, filed February 7, 2008 **

Applicant: Manuel Vega et al.

Serial No.: 10/022,249

Filed: December 17, 2001

Attorney's Docket No.: 17109-002001 / 911 Supplemental Information Disclosure Statement

Respectfully submitted,

Stephanie Seidman Reg. No. 33,779

Attorney Docket No. 17109-002001 / 911

Address all correspondence to:

Stephanie Seidman

Fish & Richardson P.C.

12390 El Camino Real

San Diego, California 92130

Telephone: (858) 678-4777 Facsimile: (202) 626-7796 email: seidman@fr.com